

## TSO-C112e FIELD COMMENTS

#	Name	Paragraph Section	Comment (state issue) Suggested resolution (state possible solution)	AIR-130 Disposition
	ANM-100L	Pg 2, Sec (d.)	<p>The term “generally” used in the note section implies there are occasions that earlier versions of DO-160D can be appropriate</p> <p>If there are no instances that earlier versions of DO-160D (Changes 1 and 2 only) are not appropriate, the term “generally” should be deleted.</p> <p>Remove the term “generally” from this note and add a table that denotes what versions of DO-160 are generally appropriate for compliance.</p>	Not accepted. “generally” allows a manufacturer the leeway to use an earlier version of DO-160 incorporating changes 1 and 2 but makes it clear the manufacturer will need to substantiate how and why they felt they can use an earlier version of DO-160.
	ANM-100D	P. 6 8.a	<p>Wrong address for RTCA.</p> <p>RTCA relocated.</p> <p>Replace “1828 L Street NW, Suite 805,” with “1150 18th Street NW, Suite 910,”</p>	Accepted. Address updated.
	ANM-100D	P. 6 8.b	<p><a href="http://www.access.gpo.gov">www.access.gpo.gov</a> is no longer used.</p> <p><a href="http://www.access.gpo.gov">www.access.gpo.gov</a> currently redirects visitors to <a href="http://www.gpo.gov">www.gpo.gov</a>,</p> <p>Replace          “You can also order copies online at <a href="http://www.access.gpo.gov">www.access.gpo.gov</a>.          Select “Access,” then “Online Bookstore.” Select “Aviation,” then “Code of Federal Regulations.”          with          “You can also order copies online at <a href="http://www.gpo.gov">www.gpo.gov</a>”</p>	Accepted. Hyperlink updated.
	ANM-100D	P. 6 Signature block	<p>“Aircraft Engineering” and “Division” should be on the same line. – Formatting</p> <p>Delete carriage return in front of “Division”</p>	Accepted. Text corrected.

	ANM-100L	Pg 13, Appendix 2, Sec 1.1	<p>The term “highlighted in yellow...” can be confusing if printed out as a document on a black ink printer.</p> <p>On a black ink printer the highlighted text is shadowed as well as underlined.</p> <p>Remove the term “...in yellow...” The highlighted text will still be shadowed by the printer.</p>	Accepted. Text changed.
	ANM-100D	P. 14 ¶ 2.2.6.1.1 a.	<p>Reword requirement to a positive statement of how the system should respond to All Call.</p> <p>Eliminate negative requirement.</p> <p>Change “it shall not accept” to “it shall ignore”</p>	Paragraph 2 of Appendix 2 was removed. .
	Chicago ACO, Systems & Flight Test	Page 3, para 4.a	<p>Clarify reference to equipment marking in 14 CFR Part 43 appendix F</p> <p>The current 14 CFR Part 43 appendix F specifies <b>ATC Transponder Tests</b> that must be verified for class 1A, 2A, 3A, 4, 1B, 2B, 3B equipment. It does not specify equipment marking.</p> <p>Revise last sentence of paragraph 4.a: current wording is “... contains a cross-reference to the equipment marking currently in 14 CFR Part 43 appendix F.”</p> <p>change to “... contains a cross-reference to the equipment <b>class operational test requirements</b> <del>marking</del> currently in 14 CFR Part 43 appendix F.”</p>	Not accepted. This table does not reference test requirements. It is intended to cross reference marking requirements.
	ANE-150	Page 3, Para 4.d	<p>Please change the word “may” to must to make this suggestion a requirement: “You <b>may</b> use electronic part marking to identify software or airborne electronic hardware components by embedding the identification within the hardware component itself (using software) rather than marking it on the equipment nameplate.”</p> <p>Electronic part marking to access the software version or hardware version should be mandatory to make aircraft configuration easier to identify correctly.</p>	Not accepted. Driving a new requirement could potentially create undue cost on manufacturers. Also, most if not all transponder units already provide electronic marking. This comment has been forwarded on to the TSO template manager for further review. This comment will be addressed as part of the regular TSO template update.

	ANE-150	Page 5, para 6.g.	<p>Please at a minimum keep the paragraph in the final version, “g. If the article includes software, the appropriate documentation defined in RTCA/DO 178B including all data supporting the applicable objectives in RTCA/DO-178B Annex A, Process Objectives and Output by Software</p> <p>This is an excellent change as what we really want to review is the evidence that the applicant has found compliance to DO-178b Annex A objectives</p>	Noted
	ANE-150	Page 6 para 6 h.	<p>This is also a great addition. Thank you and please let this remain in the final version. “h. If the article includes complex custom airborne electronic hardware, the appropriate hardware life cycle data in combination with design assurance level as defined in RTCA/DO 254, Appendix A, Table A-1.”</p> <p>This is also a very positive change. I hope other TSOs match the changes you have initiated in paragraphs 6.g,h&amp;i. I still firmly believe that the potential level of complexity involved with software should not allow TSOs to approve level A and B software, but it TSOs are going to continue, at least this submission requirements may give reviewers an incrementally better view into the applicant’s software based on current FAA requirements</p>	Noted
	ANE-150	Page 6, para 6.i.	<p>Please change this to “you must submit” for item i so that we can review this in the office as part of the package. “i. If the article contains non-TSO function(s), <b>you must also make available</b> items 6.a through 6.h as they pertain to the non-TSO function(s).”</p> <p>The applicant could make these items available only at their site, which would force us to travel to their location at a time of government austerity regarding travel. Please <b>require</b> the applicants to submit this data as part to their TSO package. It is important to understand these non-TSO functions at installation time as well, so some data requirements for the installation manuals would also be helpful.</p>	Not accepted. It is against the law for Federal employees to share sensitive or proprietary information. Current TSO language leaves it to the discretion of the ACO to ask for more supporting data before providing a “Pass.”